Fig. 1

DATA STRUCTURE	bit	Identifier
digital_copy_control_descriptor () {		
descriptor_tag	8	unimsbf
descriptor_length	8	unimsbf
digital_recording_control_data	2	bslbf
maximum_bit_rate_flag	1	bslbf
component_control_flag	1	bslbf
copy_control_type	2	bslbf
if(copy_control_type==01‖copy_control_type==11){		
APS_control_data	2	bslbf
}		
else{		
reserved_future_use	2	bslbf
}		
if(maximum_bit_rate_flag == 1) {		
maximum_bit_rate	8	unimsbf
}		
if(component_control_flag ==1){		
component_control_length		
for(j=0;j<N;j++){		
component_tag	8	unimsbf
digital_recording_control_data	2	bslbf
maximum_bitrate_flag	1	bslbf
reserved_future_use	1	bslbf
copy_control_type	2	bslbf
if(copy_control_type==01‖copy_control_type==11) {		
APS_control_data	2	bslbf
}		
else{		
reserved_future_use	2	bslbf
}		
if(maximum_bitrate_flag==1){		
maximum_bitrate	8	unimsbf
}		
}		
}		
}		

Fig. 2

DATA STRUCTURE	bit	Identifier
content_availability_descriptor () {		
descriptor_tag	8	unimsbf
descriptor_length	8	unimsbf
reserved_future_use	2	bslbf
retention_mode	1	bslbf
retention_state	3	bslbf
encryption_mode	1	bslbf
image_constraint_token	1	bslbf
for(i=0;i<N;i++){		
reserved_future_use	8	unimsbf
}		
}		

Fig. 3

VIDEO RECORDING AND REPRODUCING APPARATUS	5
PRINTER	6
PERSONAL COMPUTER	7

RECEIVER 2

3

1

Fig. 4A

188 BYTES(TS PACKET)

4 BYTES

| HEADER | ADAPTATION FIELD | PES DATA |

Fig. 4B

SYNC BYTE	ERROR INDICATOR	UNIT START INDICATOR	TRANSPORT PRIORITY	PID	SCRAMBLE CONTROL	ADAPTATION FIELD CONTROL	CYCLIC COUNTER
8BITS	1BIT	1BIT	1BIT	13BITS	2BITS	2BITS	4BITS
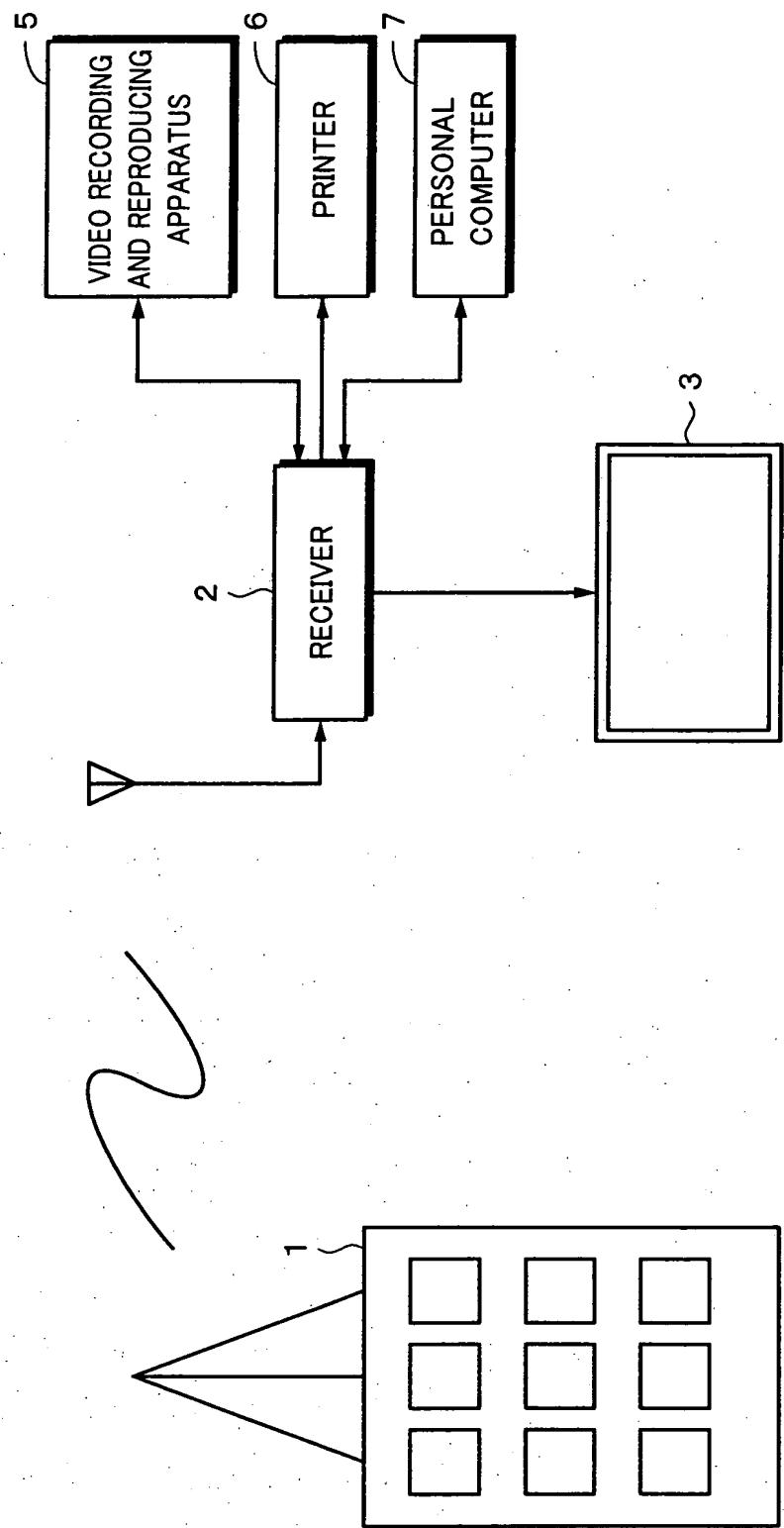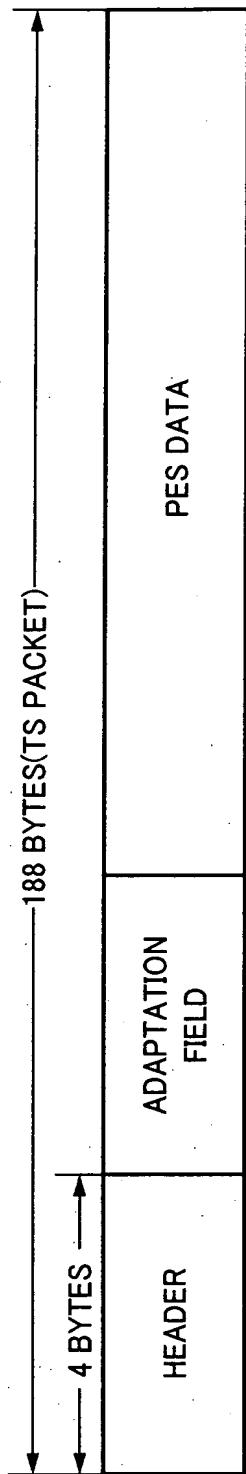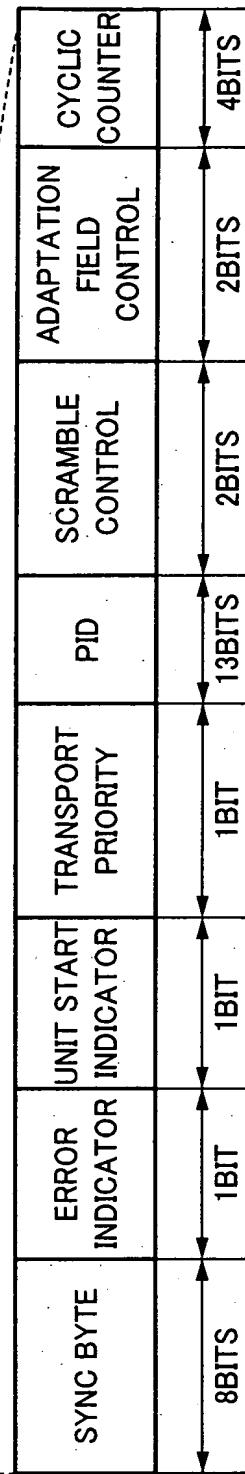
Fig. 5

DATA STRUCTURE	bit	Identifier
still_image_copy_control_descriptor () {		
descriptor_tag	8	unimsbf
descriptor_length	8	unimsbf
reserved_future_use	3	bslbf
image_resolution_control	1	bslbf
recording_control	1	bslbf
printing_control	1	bslbf
expiration_date_flag	1	bslbf
component_flag	1	bslbf
if(image_resolution_control==1){		
maximum_horizontal_pixel_number	16	unimsbf
maximum_vertical_pixel_number	16	unimsbf
}		
if(recording_control==1){		
reserved_future_use	4	bslbf
record_prohibited	1	bslbf
recording_security	1	bslbf
print_prohibited	1	bslbf
recording_constrain_bit	1	bslbf
number_of_record	8	unimsbf
}		
if(printing_control==1){		
print_prohibited	1	bslbf
print_constraint_bit	1	bslbf
number_of_print	6	unimsbf
}		
if(expiration_date_flag==1){		
expiration_date	40	bslbf
}		
if(component_flag==1){		
component_tag	8	unimsbf
}		
for(i=0;i<N;i++){		
reserved_future_use	8	unimsbf
}		
}		

Fig. 6
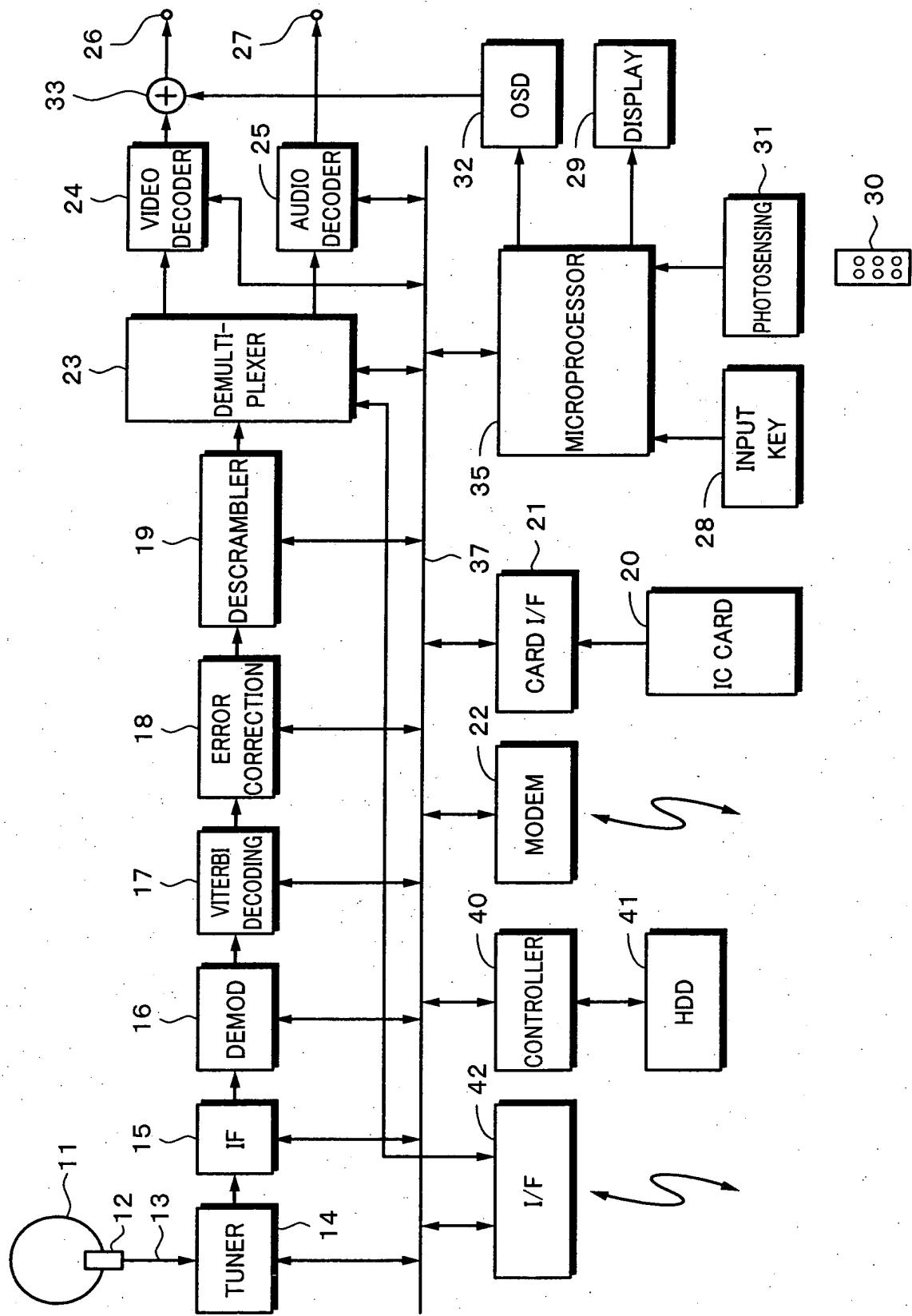
Fig. 7

DATA STRUCTURE	bit	Identifier
program_map_section(){		
table_id	8	unimsbf
section_syntax_indicator	1	bslbf
'0'	1	bslbf
reserved	2	bslbf
section_length	12	unimsbf
program_number	16	unimsbf
reserved	2	bslbf
version_number	5	unimsbf
current_next_indicator	1	bslbf
section_number	8	unimsbf
last_section_number	8	unimsbf
reserved	3	bslbf
PCR_PID	13	unimsbf
reserved	4	bslbf
program_info_length	12	unimsbf
for(i=0;i<N;i++){		
descriptor()		
}		
for(i=0;i<N;++){		
stream_type	8	unimsbf
reserved	3	bslbf
elementary_PID	13	unimsbf
reserved	4	bslbf
ES info length	12	unimsbf
for(j=0;j<N;j++){		
descriptor()		
}		
}		
CRC_32	32	rpchof
}		

Fig. 8

DATA STRUCTURE	bit	Identifier
event_information_section(){		
table_id	8	unimsbf
section_syntax_indicator	1	bslbf
reserved_future_use	1	bslbf
reserved	2	bslbf
section_length	12	unimsbf
service_id	16	unimsbf
reserved	2	bslbf
version_number	5	unimsbf
current_next_indicator	1	bslbf
section_number	8	unimsbf
last_section_number	8	unimsbf
transport_stream_id	16	unimsbf
original_network_id	16	unimsbf
segment_last_section_number	8	unimsbf
last_table_id	8	unimsbf
for(i=0;i<N;i++){		
event_id	16	unimsbf
start_time	40	bslbf
duration	24	unimsbf
running_status	3	unimsbf
free_CA_mode	1	bslbf
description_loop_length	12	unimsbf
for(j=0;j<M;j++){		
description()		
}		
}		
CRC_32	32	rpchof
}		

Fig. 9

DATA STRUCTURE	bit	Identifier
service_description_section(){		
table_id	8	unimsbf
section_syntax_indicator	1	bslbf
reserved_future_use	1	bslbf
reserved	2	bslbf
section_length	12	unimsbf
transport_stream_id	16	unimsbf
reserved	2	bslbf
version_number	5	unimsbf
current_next_indicator	1	bslbf
section_number	8	unimsbf
last_section_number	8	unimsbf
original_network_id	16	unimsbf
reserved_future_use	8	bslbf
for (i = 0;i< N;i++) {		
service_id	16	unimsbf
reserved_future_use	6	bslbf
EIT_schedule_flag	1	bslbf
EIT_present_following_flag	1	bslbf
running_status	3	unimsbf
free_CA_mode	1	bslbf
descriptors_loop_length	12	unimsbf
for (j = 0;j< M;j++) {		
descriptor()		
}		
}		
CRC_32	32	rpchof
}		

Fig. 10

START → S1

S1 —YES→ S2
S1 —NO→ S8

S2 —1→ S3
S2 —0→ S4

S4 → S3

S3 → S5

S5 —1→ S6
S5 —0→ S7

S8 —YES→ S10
S8 —NO→ S9

S10 —00→ S9
S10 —10→ S11
S10 —00,01→ S12
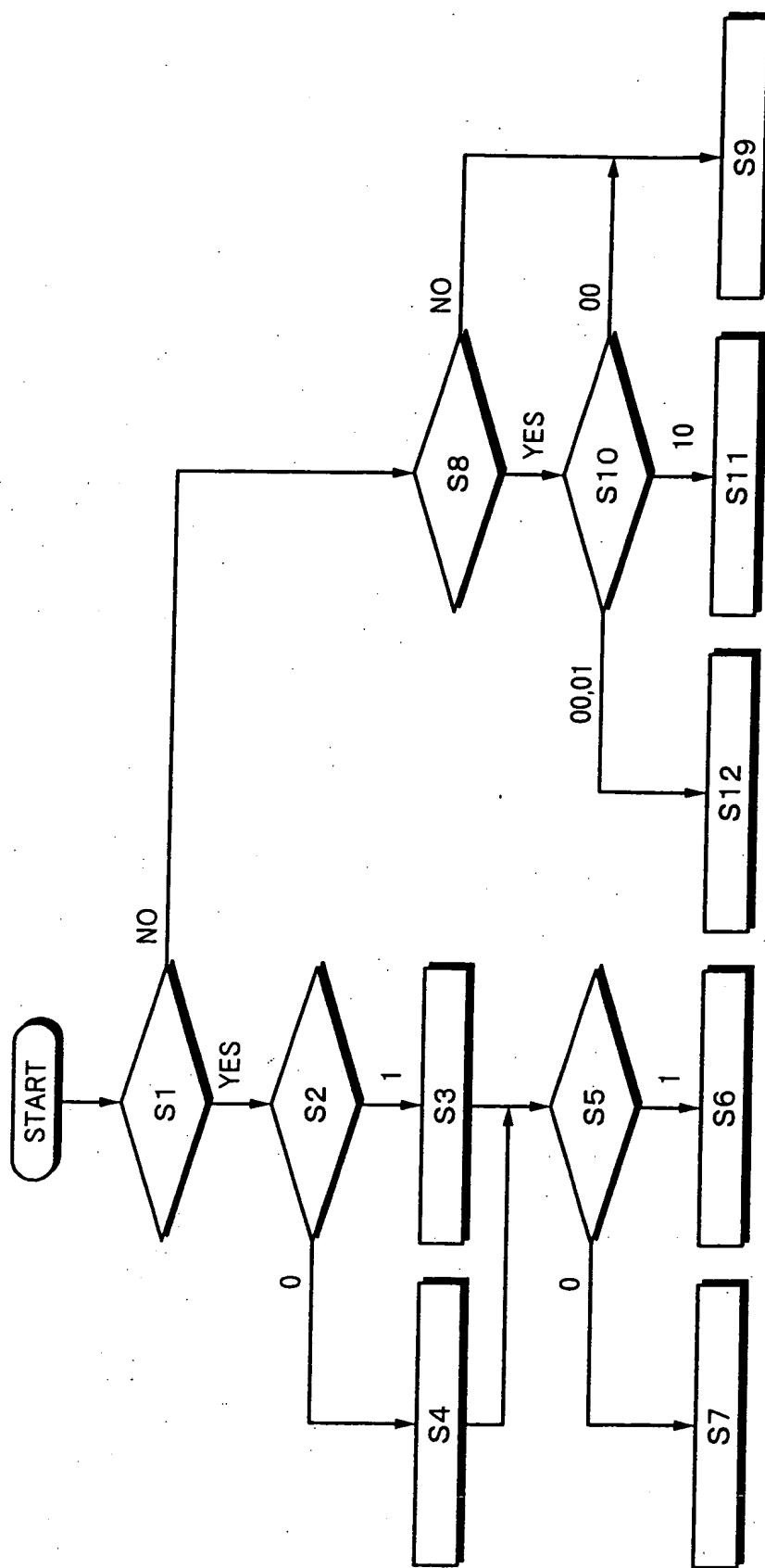
Fig. 11
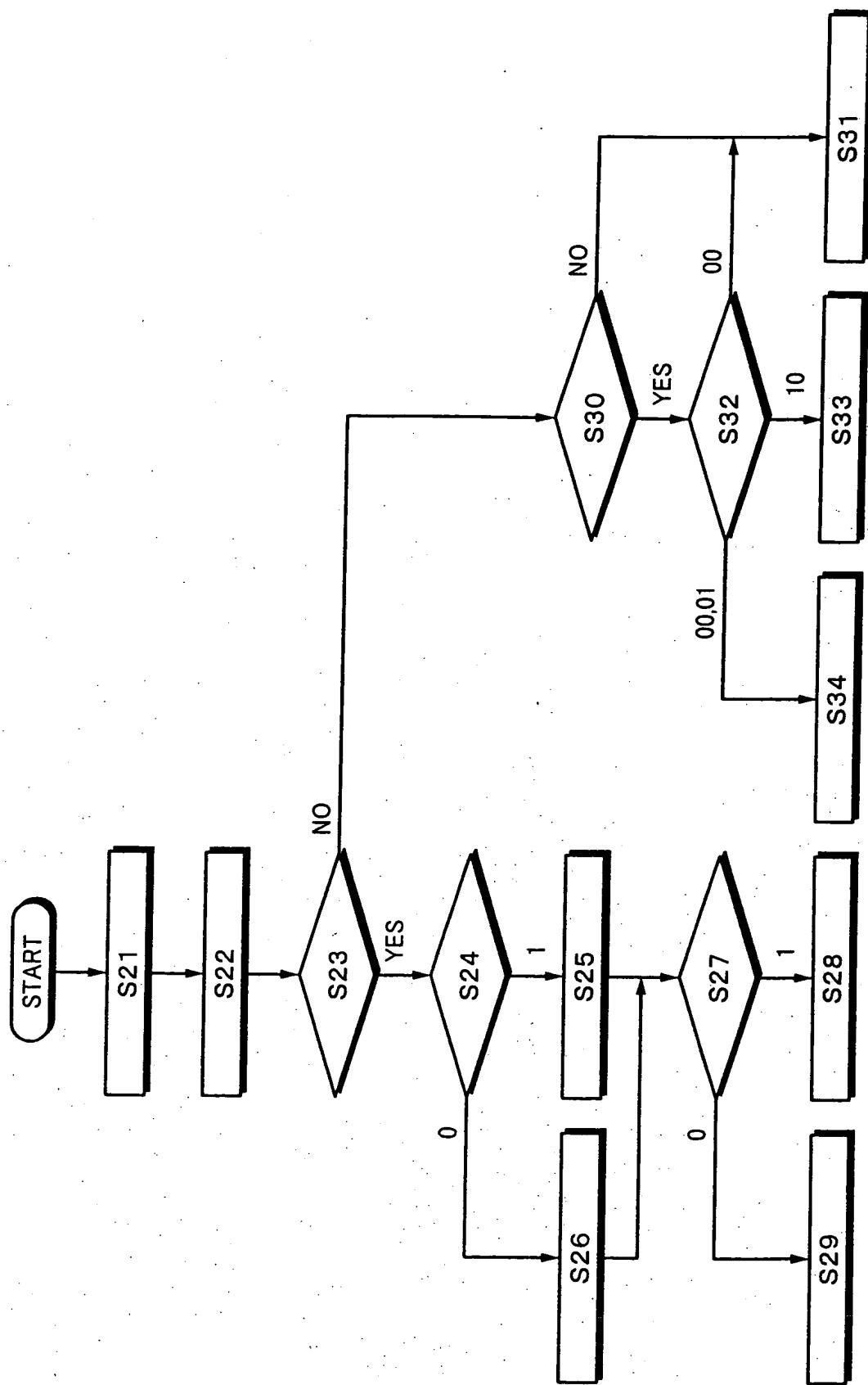
DESCRIPTION OF REFERENCE NUMERALS

1   BROADCASTING STATION

2   RECEIVER

3   TELEVISION RECEIVER

5   VIDEO RECORDING AND REPRODUCING APPARATUS

6   PRINTER

7   PERSONAL COMPUTER

S1   STILL_IMAGE_COPY_CONTROL_DESCRIPTOR EXISTS IN PMT?

S2   printing_control?

S3   PRINTING PROCESS ACCORDING TO print_prohibited, print_constrain_bit,

        number_of_print, image_resolution_control, AND expiration_date

S4   PRINTABLE WITHOUT RESTRICTING CONDITION

S5   recording_control?

S6   RECORDING PROCESS ACCORDING TO recording_prohibited,

        recording_security, print_prohibited, number_of_print,

        image_resolution_control, AND expiration_date

S7   RECORDABLE WITHOUT RESTRICTING CONDITION

S8   DIGITAL_COPY_CONTROL_DESCRIPTOR EXISTS IN PMT?

S9   PRINTABLE AND RECORDABLE WITHOUT RESTRICTING CONDITION

S10   digital_recording_control_data?

S11   PRINTING PROCESS ACCORDING TO print_prohibited = 0,

        print_constrain_bit = 1, AND number_of_print = 1

        RECORDING PROCESS ACCORDING TO record_prohibited = 0, record_security

        = 1,   print_prohibited = 0, AND number_of_record = 1

S12   PRINTING PROCESS ACCORDING TO print_prohibited = 1,

12/13

RECORDING PROCESS ACCORDING TO record_prohibited = 1

S21 SELECT RESERVATION PROGRAM

S22 OBTAIN EIT/SDT OF RESERVATION PROGRAM

S23 STILL_IMAGE_COPY_CONTROL_DESCRIPTOR EXISTS IN EIT/SDT?

S24 printing_control?

S25 PRINT RESERVING PROCESS ACCORDING TO print_prohibited,

     print_constrain_bit, number_of_print, image_resolution_control,

     AND expiration_date

S26 PRINT RESERVING PROCESS OF PRINTABLE WITHOUT RESTRICTING CONDITION

S27 recording_control?

S28 RECORDING RESERVING PROCESS ACCORDING TO recording_prohibited,

     recording_security, print_prohibited, number_of_print,

     image_resolution_control, AND expiration_date

S29 RESERVING PROCESS OF RECORDABLE WITHOUT RESTRICTING CONDITION

S30 DIGITAL_COPY_CONTROL_DESCRIPTOR EXISTS IN PROGRAM INFORMATION OF

     EIT/SDT?

S31 RESERVING PROCESS OF PRINTABLE AND RECORDABLE WITHOUT RESTRICTING

     CONDITION

S32 digital_recording_control_data?

S33 PRINT RESERVING PROCESS ACCORDING TO print_prohibited = 0,

     print_constrain_bit = 1, AND number_of_print = 1,

     RECORDING RESERVING PROCESS ACCORDING TO record_prohibited = 0,

     record_security = 1, print_prohibited = 0, AND number_of_record = 1

S34 PRINTER RESERVATION IS IMPOSSIBLE, STILL IMAGE RECORDING RESERVATION

     IS IMPOSSIBLE